

AMENDMENTS TO THE SPECIFICATION:

Please amend the paragraph beginning at page 1, line 10, as follows:

Among those for use in ink jet printers is a known ink tank of such a type having the ink absorbed by and held in an ink absorbent material such as foam and felt. A foam-type ink tank, for example, has a container in which foam that has absorbed and held ink is contained therein, an ink outlet communicating with the foam container, and ~~an~~a vent port communicating with the atmosphere for opening the foam container into the atmosphere. When ink is sucked from the ink outlet by the ejection pressure of an ink jet head, air corresponding to the sucked amount of ink is caused to flow into the foam container.

Please amend the paragraph beginning at page 2, line 3, as follows:

~~However, the~~The method of detecting the ink end by calculating the consumed amount of ink and the like has the following problem. Since the ejected amount of ink from the ink jet head and the sucked amount of ink through the ink pump undergo wide variation, the consumed amount of ink that has been calculated according to the above amounts also shows a variation far greater than that of the actually consumed amount of ink. Therefore, a great margin needs setting in order to settle the ink end. Consequently, a greater amount of ink may be left at a point of time that the ink end is detected, whereby ink may often be wasted.

Please amend the paragraph beginning at page 2, line 12, as follows:

Therefore, with ~~a~~back surfaces of a reflective face of a prism as an interface with respect to ink, it is conceivable to directly detect the ink end by an optical detection system utilizing optical characteristics in that the reflective face of the prism is restored as ~~its~~it was when ink is used. For example, Japanese Patent Publication No. 10-323993A and United States Patent No. 5,616,929 disclose such a detection system.

Please amend the paragraph beginning at page 2, line 18, as follows:

In the case of a foam-type ink tank, however, ink absorbed by and held in the ink absorbent material (foam) is always kept in contact with the reflective face of the prism even though the back surfaces of the reflective face of the prism isare so arranged as to be exposed in the foam container, the reflective characteristics of the prism remain unchanged even when ink has run out. Consequently, the above disclosed detection system is not directly applicable to the foam-type ink tank.

Please amend the paragraph beginning at page 3, line 7, as follows:

Accordingly, when the amount of ink left in the main ink chamber decreases, bubbles become introduced from the main ink chamber into the sub ink chamber every time ink is supplied from the ink outlet into the ink jet head. When ink in the main ink chamber is completely used, the residual amount of ink in the ink tank comes to be substantially equal to only the amount of ink left in the sub ink chamber. As the residual amount of ink in the sub ink chamber decreases in amount further, the back surfaces of the reflective face of the prism as the interface with respect to ink isare exposed from the liquid level of ink, and the reflective condition of the reflective face changes. In other words, the reflective face kept from serving as a reflective face while the back surfaces thereof isare covered with ink gradually recovers its reflective function with the liquid level of ink going down. Therefore, the condition where the residual amount of ink has decreased to the predetermined amount or smaller is detectable according to the amount of reflected light on the reflective face. Consequently, the ink end is detectable at a point of time the residual amount of ink has substantially completely used by making the capacity of the sub ink chamber sufficiently small.

Please amend the paragraph beginning at page 4, line 12, as follows:

It is therefore an object of the invention is to provide an ink tank capable of obviating a harmful influence caused by the fact that the reflective condition of a reflective face of a prism remains unchanged immediately after the liquid level of ink lowers because of bubbles in a sub ink chamber.

Please amend the paragraph beginning at page 4, line 16, as follows:

It is also an object of the invention is to provide an ink jet printer which makes it possible to immediately recognize a condition where an ink end is brought about by detecting the reflective condition of the reflective face of an ink tank.

Please amend the paragraph beginning at page 12, line 1, as follows:

Fig. 12 is a transverse sectional view of the essential part in the ink tank of the third embodiment, viewed from the opposite side of Fig. 11; and

Please amend the paragraph beginning at page 12, line 3, as follows:

Fig. 13 is a schematic illustration showing an essential part of an ink jet printer; and

Please amend the paragraph beginning at page 12, line 25, as follows:

An ink outlet 7 is formed in the base of the container body 2 and disc-shaped rubber packing 8 is mounted in the ink outlet 7, and a through-hole 8a bored in the center of the rubber packing 8 serves as an ink outlet hole. In the rear portion of the rubber packing 8 in the ink outlet 7, a valve 9 capable of closing the ink outlet hole 8a is arranged and is usually pressed by a coil spring 10 against the rubber packing 8 so as to block up the ink outlet hole 8a.

Please amend the paragraph beginning at page 13, line 19, as follows:

The vent port 13 communicating with the atmosphere in the container cover 4 is linked with a winding groove 13a engraved in the surface of the container cover and the end 13b of the

groove 13a is extended up to the vicinity of the edge end of the container cover 4. When the ink tank 1 is shipped, a seal 14 is adhered to the portion where the vent port 13 and the groove 13a of the container cover 4 are formed. ~~On the other hand, when~~ When the ink tank 1 is used, part 14b of the seal 14 is torn off along cutting lines 14a of the seal 14 whereby to expose the end 13b of the groove 13a, thus setting the ports 13 open to the atmosphere.

Please amend the paragraph beginning at page 14, line 14, as follows:

The ink tank 1 is provided with a detected portion having a right prism 51 for use in optically detecting whether the ink tank 1 is mounted in the tank mounting portion 95 of the ink jet printer 91 and a right prism 52 for use in optically detecting the ink end of the ink tank 1. The back surfaces of the reflective face of the right prism 52 ~~is~~are exposed in the ink reservoir 22 of the sub ink chamber 20 to serve as an interface with respect to ink.

Please amend the paragraph beginning at page 16, line 16, as follows:

~~On the other hand, the~~ The right prism 52 for detecting the ink end is directly exposed in the inside of the ink reservoir 22 from an opening 202b opened in the frame 202 defining the ink reservoir 22, and the back surfaces of each of the reflective faces 52a and 52b ~~serves~~serve as an interface with respect to ink.